

Q 9	What is Pedigree Analysis. Explain Colour blindness and Haemophilia.	CO2
Q 10	Briefly describe chromatin, chromatid and nucleosome architecture. Explain the DNA methylation and histone modification.	CO3
Q 11	Explain the polycomb repression and role of drug used in histone modification and treatment of disease.	CO4

SECTION C

1. Each question will carry 20 marks. Answer any one question out of three questions.

2. Instruction: Long Answer type questions

Q 12	Explain in details DNA transcription in eukaryotes. What is major difference between DNA transcription in eukaryotes and prokaryotes.	CO3
Q 13	Explain in details RNA silencing and types of RNA silencing. Explain in details RNA interference (RNAi) such as miRNA and siRNA based silencing mechanism.	CO4
Q 14	Explain in details Mendel's Law of Dominance, Segregation and Independent Assortment.	CO1